



International Business Machines Corporation

Memorandum To: Current Licensees of the VS PASCAL COMPILER AND LIBRARY
FOR VM, 5668-767

Subject: Release 02, Modification Level 00
Features 5870, 5871, 5872, 7890,7891,7892

Release 02, Modification Level 00, of the VS PASCAL COMPILER
AND LIBRARY, is available.

Included herein are:

- Summary of Changes. (Attachment A)
- List of Program Material. (Attachment B)
- Statement of Program Support. (AttachmentC)
- List of APAR Corrections. (Attachment D)
- List of PTFs Incorporated. (Attachment E)
- Ordering Instructions. (Attachment F)

Any discrepancies between the material received and the items listed
above should be reported using the enclosed Questionnaire.

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12/88



(ATTACHMENT A)
SUMMARY OF CHANGES

VS PASCAL COMPILER AND LIBRARY FOR VM, 5668-767
Version 1, Release 2, Modification 0
Features: 5870 / 5871 / 5872
7890 / 7891 / 7892

VS Pascal Version 1 Release 2 provides significant enhancements over Release 1, a number of which are in response to long-standing customer requirements:

- **Transient Run-time Library** -- With prior releases of VS Pascal, the run-time library was statically link-edited with the object code generated by the compiler to produce the run-time module. The transient run-time library architecture of VS Pascal V1R2 yields several important advantages, including reduced load-module size, shared segment support, and LPA/ELPA residency. The static form of the run-time library is also retained.
- **Variable-length Parameter Lists** -- Support for varying-length parameter lists (a feature not provided in Standard Pascal) will make it much easier to interface VS Pascal applications programs to such IBM software products as ISPF, ISPF/PDS and GDDM, and will meet the requirements for IMS support.
- **Conditional Compilation** -- This new feature permits a programmer to identify blocks of code within a source program that are to be included or bypassed during compilation, based on a compile-time option. For example, the programmer may include additional "debugging" code in his program and, once the program has been thoroughly tested, those sections of code can be ignored when the program is re-compiled for the production environment.
- **Multiple Heaps and Storage Allocation Control** -- In Standard Pascal, all storage acquired by an application is allocated in a single heap. VS Pascal V1R2 supports multiple heaps, thereby allowing each component of a multi-component application system to create and manage its own heap storage independent of the heaps associated with the other components. In addition, V1R2 permits the programmer to specify the sizes for both the initial and subsequent allocations of storage to a heap, so as to better tune storage utilization by the application.
- **DBCS Support** -- VS Pascal V1R2 provides new DBCS datatypes, and new functions to manipulate DBCS and mixed SBCS/DBCS strings in a convenient, character-oriented manner.
- **NLS Enhancements** -- VS Pascal V1R2 provides facilities that permit the customer to customize the compiler to work with his national language code page. The product is also enabled for translation of its messages and HELP panels to other national languages.

Additional enhancements are:

- Support for selected features of the proposed ANSI/IEEE Extended Pascal standard.
- Enhancements that permit the debugger function to be used with larger programs, plus other debugger usability enhancements.
- Support for 999 %INCLUDEs in a compilable unit.
- The ability to include a compilation time/date stamp and user-specified text in an object module.
- Generation of an Identification Record (IDR) date stamp in object modules.
- Improved error handling for compiler options and directives.
- Improved error handling when calling Assembler routines.

**(ATTACHMENT B)
LIST OF PROGRAM MATERIALS**

**VS PASCAL COMPILER AND LIBRARY FOR VM,5668-767
Version 1, Release 2, Modification 0
Features: 5870 / 5871 / 5872
7890 / 7891 / 7892**

BASIC MACHINE READABLE MATERIAL

Order Number	Media	External Identification
5870	9/1600 Mag Tape	BASIC-CMS
5871	9/6250 Mag Tape	BASIC-CMS
5872	3480 Cartridge	BASIC-CMS

OPTIONAL MACHINE READABLE MATERIAL

Order Number	Media	External Identification
7890	9/1600 Mag Tape	MVS/VM OPTIONAL SOURCE
7891	9/6250 Mag Tape	MVS/VM OPTIONAL SOURCE
7892	3480 Cartridge	MVS/VM OPTIONAL SOURCE

BASIC DOCUMENTATION: Program Directory and one copy of each of the following documents will be supplied automatically with the basic machine readable material:

- VS PASCAL APPLICATION PROGRAMMING GUIDE, SC26-4319-1
- VS PASCAL LANGUAGE REFERENCE, SC26-4320-1
- VS PASCAL INSTALLATION & CUSTOMIZATION FOR VM, SC26-4342-1
- VS PASCAL LICENSED PROGRAM SPECIFICATION, GC26-4317-1
- VS PASCAL REFERENCE SUMMARY, SX26-3760-1
- VS PASCAL DIAGNOSIS GUIDE AND REFERENCE, LY27-9525-1

(ATTACHMENT C)
STATEMENT OF PROGRAM SUPPORT

VS PASCAL COMPILER AND LIBRARY FOR VM, 5668-767

Version 1, Release 2, Modification 0

Features: 5870 / 5871 / 5872
7890 / 7891 / 7892

Central service, including the IBM support center, will be available until discontinued by IBM upon six months written notice under the terms and conditions of the Agreement for IBM Licensed Programs. Central service, including the IBM Support Center, will be provided only through the customer location designated for the basic license.

(ATTACHMENT D)
LIST OF APAR CORRECTIONS

VS PASCAL COMPILER AND LIBRARY FOR VM, 5668-767

Version 1, Release 2, Modification 0

Features: 5870 / 5871 / 5872
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List of APARs

1. PL12020
2. PL17420
3. PL17959
4. PL18025
5. PL18687
6. PL18688
7. PL20071
8. PL20773
9. PL20777
10. PL22514
11. PL23599
12. PL26174
13. PL27419
14. PL27652
15. PL29141
16. PL29702
17. PL29897
18. PL29899
19. PL33935
20. PL33981

**(ATTACHMENT E)
LIST OF PTFs INCORPORATED**

VS PASCAL COMPILER AND LIBRARY FOR VM, 5668-767

Release 2, Modification 0

**Features: 5870 / 5871 / 5872
7890 / 7891 / 7892**

List of PTFs

1. UL25861
2. UL20983
3. UL23716
4. UL26868
5. UL39645
6. UL36467
7. UL39647
8. UL35206
9. UL38764
10. UL33613
11. UL36708
12. UL38764
13. UL34251
14. UL34838
15. UL38648
16. UL37819
17. UL39649

**(ATTACHMENT F)
SPECIAL ORDERING INFORMATION**

**VS PASCAL COMPILER AND LIBRARY FOR VM, 5668-767
Version 1, Release 2, Modification 0**

These instructions are for Current Licensees of VS PASCAL COMPILER AND LIBRARY FOR VM, 5668-767 who wish to receive Version 1 Release 2 Modification 0 of this program, and any maintenance or service updates that may subsequently be issued for this new release.

INSTRUCTIONS FOR THE CUSTOMER:

1. Check the boxes in Part 1 for the materials you wish to receive.
2. Fill in your Company's name, customer number, ship to address and sign your name in Part 2.
3. Return this form to your IBM Marketing Representative.

PART 1:

BASIC MATERIALS:

- FC 5870 Version 1, Release 2 Object Code on 9/1600 magnetic tape.
- FC 5871 Version 1, Release 2 Object Code on 9/6250 magnetic tape.
- FC 5872 Version 1, Release 2 Object Code on magnetic cartridge.

OPTIONAL MATERIAL:

- FC 7890 Version 1, Release 2 Restricted Source Code on 9/1600 magnetic tape.
- FC 7891 Version 1, Release 2 Restricted Source Code on 9/6250 magnetic tape.
- FC 7892 Version 1, Release 2 Restricted Source Code on magnetic cartridge.

PART 2:

CUSTOMER NAME: _____ **CUST. NO.** _____

SHIP TO ADDRESS: _____

AUTHORIZED SIGNATURE: _____ **DATE** _____

INSTRUCTIONS FOR THE IBM REPRESENTATIVE

Change the customer's profile in the AAS system using an MES transaction as follows:

1. Delete the current feature code and add the new 5870/5871 ./ 5872 feature code checked above; only one 58xx. feature code may be added.
2. If applicable, delete the current 7890/7891/7892 feature code and add the 71xx feature code checked above; only one 71xx feature code may be added.

No change is necessary for the 8xxx codes; the customer will receive all updates for these feature codes automatically.

3. Check the 'ship to address' above with the one currently on file, and change if appropriate.

Note: Software Distribution will begin processing this MES order the Monday following your entry of it into AAS system; within seven calendar days after processing begins, the order will leave the Software Distribution plant.

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